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- (i) The first 24 hour period for mileage accumulation shall begin as soon as authorized vehicle checks, inspections and preparations are completed on each vehicle.
- (ii) The minimum mileage accumulation rate does not apply on weekends or holidays.
- (iii) If the manufacturer's mileage accumulation target is less than the minimum rate specified (300 miles per day), then the minimum daily accumulation rate shall be equal to the manufacturer's mileage accumulation target.
- (3) Mileage accumulation shall be completed on a sufficient number of test vehicles during consecutive 24 hour periods to assure that the number of vehicles tested per day fulfills the requirements of paragraph (g) of this section.
- (d) The manufacturer shall not perform any maintenance on test vehicles after selection for testing nor shall the Administrator allow deletion of any test vehicle from the test sequence, unless requested by the manufacturer and approved by the Administrator before any test vehicle maintenance or deletion.
- (e) The manufacturer will be allowed 24 hours to ship test vehicles from the assembly plant or storage facility to the test facility if the test facility is not located at the plant or storage facility or in close proximity to the plant or storage facility: Except, That the Administrator may approve more time based upon a request by the manufacturer accompanied by a satisfactory justification.
- (f) If a vehicle cannot complete the mileage accumulation or emission tests because of vehicle malfunction, the manufacturer may request the Administrator to authorize the repair of that vehicle or its deletion from the test sequence.
- (g) Whenever the manufacturer conducts testing pursuant to a test order issued under this subpart, the manufacturer shall notify the Administrator within one working day of receipt of the test order, which test facility will be used to comply with the test order and the number of available test cells at that facility. If no test cells are available at the desired facility, the

manufacturer must provide alternate testing capability satisfactory to the Administrator. The manufacturer shall complete emission testing on a minimum of four vehicles per 24 hour period including voided tests for each available test cell at his testing facility: Except, That the Administrator may approve a longer period based upon a request by the manufacturer accompanied by satisfactory justification.

- (h) The manufacturer shall perform test vehicle selection, preparation, mileage accumulation, shipping, and testing in such a manner as to assure that the audit is performed in an expeditious manner.
- (i) The manufacturer may retest any test vehicle after a fail decision has been reached in accordance with paragraph (d) of §86.610 based on the first test on each vehicle; except, that the Administrator may approve retesting at other times during the audit based upon a request by the manufacturer accompanied by a satisfactory justification. The manufacturer may test each vehicle a total of three times. The manufacturer shall test each vehicle the same number of times. The manufacturer may accumulate additional mileage on test vehicles before conducting retests, subject to the provisions of paragraph (c) of this section.

[41 FR 31483, July 28, 1976, as amended at 43 FR 4552, Feb. 2, 1978; 44 FR 2975, Jan. 12, 1979; 45 FR 14524, Mar. 5, 1980; 47 FR 49813, Nov. 2, 1982; 49 FR 48482, Dec. 12, 1984. Redesignated and amended at 54 FR 2123, Jan. 19, 1989]

\$86.608-90 Test procedures.

- (a) The prescribed test procedures are contained in subpart B and/or subpart C of this part 86. For purposes of Selective Enforcement Audit testing, the manufacturer shall not perform any of the test procedures in subpart B of this part relating to evaporative emission testing, except as specified in paragraph (a)(2) of this section.
- (1) The Administrator may, on the basis of a written application by a manufacturer, prescribe test procedures other than those in subpart B and/or subpart C of this part for any motor vehicle which he determines is not susceptible to satisfactory testing using the procedures in subpart B and/

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or subpart C of this part. The Administrator may, based on advance application by a manufacturer, approve optional test procedures for use in Selective Enforcement Audit testing.

- (2) The following exceptions to the test procedures in subpart B of this part are applicable to Selective Enforcement Audit testing:
- (i) For mileage accumulation, the manufacturer may use test fuel meeting the specifications of mileage and service accumulation fuels of §86.113. Otherwise, the manufacturer may use fuels other than those specified in this section only with the advance approval of the Administrator.
- (ii) The manufacturer may measure the temperature of the test fuel at other than the approximate mid-volume of the fuel tank, as specified in §86.131-96(a) with only a single temperature sensor, and may drain the test fuel from other than the lowest point of the tank, as specified in §86.131-96(b), provided an equivalent method is used. Equivalency documentation shall be maintained by the manufacturers and shall be made available to the Administrator upon request. Additionally, for any test vehicle that has remained under laboratory ambient temperature conditions for at least 6 hours prior to testing, the vehicle soak described in §86.132-96(c) may be eliminated upon approval of the Administrator. In such cases, the vehicle shall be operated through the preconditioning drive described in §86.132-96(c) immediately following the fuel drain and fill procedure described in §86.132-96(b).
- (iii) The manufacturer may perform additional preconditioning on SEA test vehicles other than the preconditioning specified in §86.132 only if the additional preconditioning had been performed on certification test vehicles of the same configuration.
- (iv) If the Administrator elects to use the evaporative canister preconditioning procedure described in §86.132–96(k), the manufacturer shall perform the heat build procedure 11 to 34 hours following vehicle preconditioning rather than according to the time period specified in §86.133–90(a). All references in §86.133–90 to an evaporative emission

enclosure (SHED) and analyzing for HC during the heat build can be ignored.

- (v) The manufacturer may substitute slave tires for the drive wheel tires on the vehicle as specified in paragraph §86.135-90(e): Provided, that the slave tires are the same size.
- (vi) If the Administrator elects to use the evaporative canister preconditioning procedure described in \$86.132-96(k), the cold start exhaust emission test described in \$86.137 shall follow the heat build procedure described in \$86.133-90 by not more than one hour.
- (vii) In performing exhaust sample analysis under §86.140.
- (A) When testing diesel vehicles, or methanol-fueled Otto-cycle vehicles, the manufacturer shall allow a minimum of 20 minutes warm-up for the HC analyzer, and for diesel vehicles, a minimum of two hours warm-up for the CO, CO₂, and NO_x analyzers. (Power is normally left on infrared and chemiluminescent analyzers. When not in use, the chopper motors of the infrared analyzers are turned off and the phototube high voltage supply to the chemiluminescent analyzers is placed in the standby position.)
- (B) The manufacturer shall exercise care to prevent moisture from condensing in the sample collection bags.
- (viii) The manufacturer need not comply with §86.142, since the records required therein are provided under other provisions of subpart G of this part.
- (ix) In addition to the requirements of subpart B of this part, the manufacturer shall prepare gasoline-fueled and methanol-fueled vehicles as follows prior to exhaust emissions testing:
- (A) The manufacturer shall inspect the fuel system to insure the absence of any leaks of liquid or vapor to the atmosphere by applying a pressure of 14.5±0.5 inches of water to the fuel system, allowing the pressure to stabilize, and isolating the fuel system from the pressure source, pressure must not drop more than 2.0 inches of water in 5 minutes. If required, the manufacturer shall perform corrective action in accordance with \$86.608 and report this action in accordance with \$86.609.
- (B) When performing this pressure check, the manufacturer shall exercise

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care to neither purge nor load the evaporative emission control system.

(Č) The manufacturer shall not modify the test vehicle's evaporative emission control system by component addition, deletion, or substitution, except to comply with paragraph (a)(2)(ii) of this section if approved in advance by the Administrator.

(3) The following exceptions to the test procedures in subpart C of this part are applicable to Selective Enforcement Audit testing:

(i) The manufacturer may measure the temperature of the test fuel at other than the approximate mid-volume of the fuel tank, as specified in §86.231(a), and may drain the test fuel from other than the lowest point of the fuel tank as specified in §86.231(b), provided an equivalent method is used Equivalency documentation shall be maintained by the manufacturer and shall be made available to the Administrator upon request.

(ii) In performing exhaust sample analysis under §86.240, the manufacturer shall exercise care to prevent moisture from condensing in the sample collection bags.

(iii) The manufacturer need not comply with §86.242 since the records required therein are provided under other provisions of subpart G of this part.

(iv) In addition to the requirements of subpart C of this part, the manufacturer shall prepare gasoline-fueled vehicles as follows prior to exhaust emission testing:

(A) The manufacturer shall inspect the fuel system to ensure the absence of any leaks of liquid or vapor to the atmosphere by applying a pressure of 14.5 ± 0.5 inches of water $(3.6\pm0.1 \text{ kPa})$ to the fuel system allowing the pressure to stabilize and isolating the fuel system from the pressure source. Following isolation of the fuel system, pressure must not drop more than 2.0 inches of water (0.5 kPa) in five minutes. If required, the manufacturer shall perform corrective action in accordance with paragraph §86.608(d) and report this action in accordance with paragraph §86.609(d).

(B) When performing this pressure check, the manufacturer shall exercise care to neither purge nor load the evaporative emission control system.

(C) The manufacturer shall not modify the test vehicle's evaporative emission control system by component addition, deletion, or substitution, except if approved in advance by the Administrator, to comply with paragraph (a)(3)(i) of this section.

(b) (1) The manufacturer shall not adjust, repair, prepare, or modify the vehicles selected for testing and shall not perform any emission tests on vehicles selected for testing pursuant to the test order unless this adjustment, repair, preparation, modification, and/or tests are documented in the manufacturer's vehicle assembly and inspection procedures and are actually performed or unless these adjustments and/or tests are required or permitted under this subpart or are approved in advance by the Administrator.

(2) For 1981 and later model years the Administrator may adjust or cause to be adjusted any engine or vehicle parameter which the Administrator has determined to be subject to adjustment for new vehicle compliance testing (e.g., for certification or Selective Enforcement Audit testing) in accordance with §86.081-22(c)(1), to any setting within the physically adjustable range of that parameter, as determined by the Administrator in accordance with §86.081-22(e)(3)(ii), prior to the performance of any tests. However, if the idle speed parameter is one which the Administrator has determined to be subject to adjustment, the Administrator shall not adjust it to a setting which causes a lower engine idle speed than will be possible within the physically adjustable range of the idle speed parameter on the vehicle when it has accumulated 4,000 miles, all other parameters being adjusted identically for the purpose of comparison. The Administrator, in making or specifying such adjustments, will consider the effect of the deviation from the manufacturer's recommended setting on emissions performance characteristics as well as the likelihood that similar settings will occur on in-use light-duty vehicles or light-duty trucks. In determining likelihood, the Administrator will consider factors such as, but not limited to, the

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effect of the adjustment on vehicle performance characteristics and surveillance information from similar in-use vehicles.

- (c) Prior to performing exhaust emission testing on an SEA test vehicle, the manufacturer may accumulate on each vehicle a number of miles equal to the greater of 4,000 miles, or the number of miles the manufacturer accumulated during certification on the emission-data vehicle corresponding to the configuration specified in the test order.
- (1) Mileage accumulation must be performed in any manner using good engineering judgement to obtain emission results representative of normal production vehicles. This mileage accumulation must be consistent with the new vehicle break-in instructions contained in the applicable vehicle owner's manual, if any.
- (2) The manufacturer shall accumulate mileage at a minimum rate of 300 miles per vehicle during each 24 hour period, unless otherwise provided by the Administrator.
- (i) The first 24 hour period for mileage accumulation shall begin as soon as authorized vehicle checks, inspections and preparations are completed on each vehicle.
- (ii) The minimum mileage accumulation rate does not apply on weekends or holidays.
- (iii) If the manufacturer's mileage accumulation target is less than the minimum rate specified (300 miles per day), then the minimum daily accumulation rate shall be equal to the manufacturer's mileage accumulation target.
- (3) Mileage accumulation shall be completed on a sufficient number of test vehicles during consecutive 24 hour periods to assure that the number of vehicles tested per day fulfills the requirements of paragraph (g) of this section.
- (d) The manufacturer shall not perform any maintenance on test vehicles after selection for testing nor shall the Administrator allow deletion of any test vehicle from the test sequence, unless requested by the manufacturer and approved by the Administrator before any test vehicle maintenance or deletion.

- (e) The manufacturer will be allowed 24 hours to ship test vehicles from the assembly plant or storage facility to the test facility if the test facility is not located at the plant or storage facility or in close proximity to the plant or storage facility: Except, That the Administrator may approve more time based upon a request by the manufacturer accompanied by a satisfactory justification.
- (f) If a vehicle cannot complete the mileage accumulation or emission tests because of vehicle malfunction, the manufacturer may request the Administrator to authorize the repair of that vehicle or its deletion from the test sequence.
- (g) Whenever the manufacturer conducts testing pursuant to a test order issued under this subpart, the manufacturer shall notify the Administrator within one working day of receipt of the test order, which test facility will be used to comply with the test cells at that facility. If no test cells are available at the desired facility, the manufacturer must provide alternate testing capability satisfactory to the Administrator. The manufacturer shall complete emission testing on a minimum of four vehicles per 24 hour period including voided tests for each available test cell at his testing facility: Except, That the Administrator may approve a longer period based upon a request by the manufacturer accompanied by satisfactory justification.
- (h) The manufacturer shall perform test vehicle selection, preparation, mileage accumulation, shipping, and testing in such a manner as to assure that the audit is performed in an expeditious manner.
- (i) The manufacturer may retest any test vehicle after a fail decision has been reached in accordance with paragraph (d) of §86.610 based on the first test on each vehicle; except, that the Administrator may approve retesting at other times during the audit based upon a request by the manufacturer accompanied by a satisfactory justification. The manufacturer may test each vehicle the same number of times. The manufacturer may accumulate additional mileage on test vehicles before

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conducting retests, subject to the provisions of paragraph (c) of this section.

[54 FR 14557, Apr. 11, 1989, as amended at 57 FR 31921, July 17, 1992; 58 FR 16045, Mar. 24, 1993; 60 FR 43898, Aug. 23, 1995]

§86.608-96 Test procedures.

Section 86.608-96 includes text that specifies requirements that differ from \$86.608-90. Where a paragraph in \$86.608-90 is identical and applicable to \$86.608-96, this is indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see \$86.608-90." Where a corresponding paragraph of \$86.608-90 is not applicable, this is indicated by the statement "[Reserved]."

- (a) The prescribed test procedures are the FTP as described in subpart B of this part, the cold temperature CO test procedure as described in subpart C of this part, and the CST as described in subpart O of this part, as applicable. For purposes of Selective Enforcement Audit testing, the manufacturer may not perform any of the test procedures in subpart B of this part relating to evaporative emission testing, except as specified in §86.608–90(a)(2).
- (1) The Administrator may select and prescribe the sequence of any CSTs. Further, the Administrator may, on the basis of a written application by a manufacturer, approve optional test procedures other than those in subparts B, C, and O of this part for any motor vehicle which is not subject to satisfactory testing using the procedures in subparts B, C, and O of this part.
- (2) through (3) [Reserved]. For guidance see §86.608–90.
- (4) The exceptions to the test procedures described in subpart O of this part that are listed in paragraphs (a)(4)(i) and (ii) of this section are applicable to Selective Enforcement Audit testing.
- (i) The manufacturer need not comply with §86.1442, since the records required therein are provided under other provisions of subpart G of this part.
- (ii) In addition to the requirements of subpart O of this part, the manufacturer must prepare vehicles as in paragraphs (a)(4)(ii) (A) through (C) of this section prior to exhaust emission testing.

- (A) The manufacturer must inspect the fuel system to insure the absence of any leaks of liquid or vapor to the atmosphere by applying a pressure of 14.5 ± 0.5 inches of water to the fuel system, allowing the pressure to stabilize, and isolating the fuel system from the pressure source. Pressure must not drop more than 2.0 inches of water in five minutes. If required, the manufacturer performs corrective action in accordance with this section and must report this action in accordance with \$86.609.
- (B) When performing this pressure check, the manufacturer must exercise care to neither purge nor load the evaporative system.
- (C) The manufacturer may not modify the test vehicle's evaporative emission control system by component addition, deletion, or substitution.
- (b) through (i) [Reserved]. For guidance see §86.608-90.

[58 FR 58423, Nov. 1, 1993]

§86.608-97 Test procedures.

Section 86.608–97 includes text that specifies requirements that differ from those specified in §§ 86.608–90 and 86.608–96. Where a paragraph in §86.608–90 or §86.608–96 is identical and applicable to §86.608–97, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see §86.608–90." or "[Reserved]. For guidance see §86.608–96."

(a) The prescribed test procedures are the Federal Test Procedure, as described in subpart B and/or subpart R of this part, whichever is applicable. the cold temperature CO test procedure as described in subpart C of this part, and the Certification Short Test procedure as described in subpart O of this part. Where the manufacturer conducts testing based on the requirements specified in Chapter 1 or Chapter 2 of the California Regulatory Requirements Applicable to the National Low Emission Vehicle Program (October, 1996), the prescribed test procedures are the procedures cited in the previous sentence, or substantially similar procedures, as determined by the Administrator. The California Regulatory Requirements Applicable to the National Low Emission Vehicle Program are incorporated by reference (see §86.1). For